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TEXAS AGRICULTURAL EXPERIMENT STATION

A. B. CONNER, DIRECTOR
COLLEGE STATION, BRAZOS COUNTY, TEXAS

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DIVISION OF FARM AND RANCH ECONOMICS

ECONOMIC PHASES OF THE MOHAIR INDUSTRY IN TEXAS

AGRICULTURAL AND MECHANICAL COLLEGE OF TEXAS
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†As of March 1, 1932.

Texas produces about one-third of the world's mohair and four-fifths of that of the United States. Since 1927 the production of mohair in Texas has exceeded that of any foreign country. Not only is the production of mohair in the United States confined very largely to Texas, but to a limited area in the state, the Edwards Plateau grazing area, where more than 90 per cent of the goat population of the state is found.

Heretofore very little information has been available on prices received by producers. A series of average prices from 1904 to date obtained directly from firms dealing with producers is presented herein. There is an urgent need for a continuous service making available statistics on prices, consumption, stocks, and other market data on mohair.

Prices of mohair fluctuate widely from year to year, but indicate no significant seasonal movement. Margins between the producers' price and the price at Boston are likewise extremely variable. From 1927 to 1931, for example, prices of the spring clip at Boston showed a differential ranging from 11 per cent to 36 per cent, or 5.8 cents to 12.6 cents per pound over the producers' price in Texas, which is probably due in part to a lack of trading on a quality basis.

Prices of mohair show response to the production cycle and general business conditions. During a period of high production over several years prices tend to move downward and conversely when production averages low over a period of years prices tend to move upward. The depressions of 1920-21 and 1930-31 had a marked influence on the mohair industry, prices of mohair being extremely low during those years.

Trends of production in foreign countries show an upward tendency. The Union of South Africa passed the bottom of its present cycle about four years ago and Turkey has shown a steady recovery since the World War.

The United States is still on an important basis, although recent imports have shown a decided decline. During the period 1923-30 imports averaged 29 per cent of domestic production, ranging from 75 per cent in 1926 to 7 per cent in 1930.

If the trend of production for the past five years were to continue, by 1936 the United States would be producing about 24 million pounds. In order to consume this amount, we should have to increase our per capita consumption about 25 per cent over the average for the past few years, which seems unlikely.

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ECONOMIC PHASES OF THE MOHAIR INDUSTRY IN TEXAS

T. R. HAMILTON*

The increasing use of statistics by business men as a guide to production and as a basis for planning for the future has led to an accumulation of considerable statistical data and to more refined methods of analysis. Statistics relative to the mohair industry have been neglected. Very few figures on stocks, consumption, prices, etc. are available. The purpose of this Bulletin is to assemble for future reference some of the more significant data on mohair and to indicate possibilities of an analysis of these data. More statistical information as to consumption, stocks, prices, production, etc. would enable ranchmen to reduce losses by better coordination of their production with the demands of the market. The initial step in preventing periods of over-production and market gluts is to make available information which will indicate when such conditions are about to take place. The rapid growth of domestic mohair production, the large proportion of the United States total produced in Texas (more than 80 per cent valued at an annual average figure of seven million dollars), and the speculative nature of the industry, make an urgent need for data which will show probable future trends.

SOURCES OF DATA

The series of prices received by producers as shown herein were obtained from the records of dealers with warehouses at various points in the producing area. The source of Boston prices is the Boston Commercial Bulletin. The other data are mostly from governmental agencies.

The producers' prices have been obtained directly from dealers. These prices represent approximately the average at which the total quantities handled by the dealers were sold, which quantities amounted in recent years to over 40 per cent of all the mohair produced in Texas (see Table 1).

METHODS OF MARKETING MOHAIR

Most of the mohair grown in the United States is sold to dealers located in Boston. Several grades are quoted on the Boston market; such as, domestic combing, first, second, third, and fourth; domestic good carding; kid first and second; good original bag Texas kid; good original bag Texas spring; Arizona and New Mexico; and average twelve months, Oregon. Some of the grades of foreign mohair quoted are Cape summer first, winter first, summer kid, and Basutos; and Turkey fair average. Quotations for those grades and kinds are given in Table 20 in the Appendix. The kid hair is of better quality and finer than grown hair, and is usually about 10 cents per pound higher. Up until about 1922 kid hair was not quoted

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separately. In the local market mohair is usually classified into three or four grades, such as fine, coarse and fine, coarse, and real coarse. No systematic grading is done locally, practically all of the grading being done at the central market. Grades proposed by the U. S. Department of Agriculture are as follows: kid combing; kid carding; combing No. 1, No. 2, No. 3; carding No. 1, No. 2, and No. 3.

Mohair is used principally in upholstering furniture, automobiles, and railroad cars. It is also used for linings of coats, fine draperies, etc.

Shearing takes place in the spring and fall, during the months of February, March, and April, and August, September, and October. The peak of the marketing is therefore reached in March-April and in September-October. The fall clip is usually larger than the spring clip. Shrinkage of Texas mohair averages 15 per cent, according to statements by local dealers.

Most of the mohair producers in Texas sell through local warehouses on a commission basis. A few dealers operate both on a commission basis and through outright purchase. The commission, until 1930, was usually 2.5 per cent of the local price. In 1930 a large amount of mohair was consigned through the cooperatives to the National Wool Marketing Corporation which was organized under the Agricultural Marketing Act. This corporation advanced in 1930 about 90 per cent of the market price, which averaged in the spring of 1930 for grown and kid, 35 and 45 cents a pound, respectively; and in the fall of 1930, 30 and 40 cents. The advance was reduced in 1931 to about 80 per cent of the appraised value. Very little mohair is carried over from one season to the next by the local dealers.

Table 1.—Quantities of Mohair Handled by Five Texas Dealers and Total Texas Production, 1924-1930.

(In 1,000 Pounds.)

Year	Amount Handled in Spring	Amount Handled in Fall	Total Handled	Total Texas Production
1925	1,670	2,043	3,713	8,519
1926	1,911	2,578	4,489	9,887
1927	2,002	2,706	4,708	11,312
1928	2,226	3,002	5,228	12,330
1929	2,692	2,972	5,664	13,500
1930	2,698	3,062	5,760	13,800

PRODUCTION

The Angora goat industry of Texas is largely confined to the Edwards Plateau grazing area, comprising all or part of forty counties, in which are found over 90 per cent of all goats in Texas. Production of mohair in Texas and the other five important states of the United States is shown in Table 2 and Table 3. Separate figures on production of kid hair are not available. The weight per fleece is obviously affected by the proportion of kids clipped, which is not known. There is little doubt, however, that the weight per fleece has been increasing (see Table 2).

Table 2.—Goats and Mohair: Estimates* of Goats Clipped, Mohair Produced, and Average Clip per Goat, 1920-1930.

(Principal Producing States.)

	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Goats Clipped (in Thousands)											
Texas**	1,834	1,984	1,750	1,797	2,008	1,857	2,367	2,579	2,800	3,000	3,140
New Mexico	124	128	110	110	127	120	135	165	170	173	188
Arizona	145	145	132	160	165	162	165	185	185	214	214
California	72	74	59	57	57	58	56	52	45	46	43
Oregon	113	115	105	103	101	110	115	115	125	120	120
Missouri	58	60	55	53	60	67	61	63	66	66	75
Total	2,346	2,506	2,231	2,280	2,518	2,374	2,899	3,159	3,391	3,619	3,780
Mohair (Including Kid Hair) Produced (in 1,000 Pounds)											
Texas	6,786	7,607	6,838	7,352	7,996	8,519	9,887	11,312	12,330	13,500	13,800
New Mexico	397	422	352	374	457	444	473	611	629	640	658
Arizona	464	479	517	560	611	599	578	685	684	750	750
California	230	244	207	211	217	220	207	203	176	175	163
Oregon	452	460	431	422	414	462	483	483	525	468	456
Missouri	145	150	143	148	162	188	171	176	178	172	179
Total	8,474	9,362	8,488	9,067	9,857	10,432	11,799	13,470	14,522	15,705	16,006
Average Clip Per Goat Clipped* (in Pounds)**											
Texas	3.7	3.8	3.9	4.1	4.0	4.6	4.2	4.4	4.4	4.5	4.4
New Mexico	3.2	3.3	3.2	3.4	3.6	3.7	3.5	3.7	3.7	3.7	3.5
Arizona	3.2	3.3	3.4	3.5	3.7	3.7	3.5	3.7	3.7	3.5	3.5
California	3.2	3.3	3.5	3.7	3.8	3.8	3.7	3.9	3.9	3.8	3.8
Oregon	4.0	4.0	4.1	4.1	4.1	4.2	4.2	4.2	4.2	3.9	3.8
Missouri	2.5	2.5	2.6	2.8	2.7	2.8	2.8	2.8	2.7	2.6	2.4
Aver. 6 States	3.6	3.7	3.8	4.0	3.9	4.4	4.1	4.3	4.3	4.3	4.2

Bureau of Agricultural Economics, U. S. Department of Agriculture Year Book and Crops and Markets, February, 1931.

*Figures for 1923, 1924 and 1925 are revisions of the department's estimates previously published.

**Most goats are clipped twice a year. In Texas, kids are clipped in the fall of the year of birth. Figures include both goats and kids clipped.

***In states where goats are clipped twice a year figures include both spring and fall clip.

Approximately 18 per cent of the 1930 production was kid hair. The increase in production of mohair in Texas has been continuous with the exception of 1922, and at a faster rate than that of other states in the United States as shown by the increasing percentage produced by Texas (Table 3). This increase has been due to the growth of the Angora goat population per ranch, to the increase in weight per fleece, and to the expansion of areas devoted to goat raising. The estimates from 1920 to 1930 were made by the U. S. Department of Agriculture and are more reliable than commercial estimates of previous years. The Angora goat industry is more concentrated than most other ranching and farming enterprises. According to the United States Census, goats were reported on ranches amounting to 1.9 per cent of the total farms and ranches in Texas in 1910, 2.6 per cent in 1920, and 2.1 per cent in 1925. Beef cattle were reported in 1925 on 30 per cent of the farms, and swine on 44.8 per cent. The principal areas producing Angora goats are shown in Figure 1. Production of mohair in the Union of South Africa and Turkey had reached a significant figure as early as 1875, as shown in Table 4. Since that date both countries have been important in the world's mohair production.

The trend of production in the Union of South Africa during the past twenty years has been downward (Figure 2).

The downward trend in Turkey, however, stopped in 1919 and since then there has been a gradual upward movement. Production of mohair in Texas, beginning with 1927, exceeded that of the Union of South Africa, the largest producing country, since which time Texas has continued to lead.

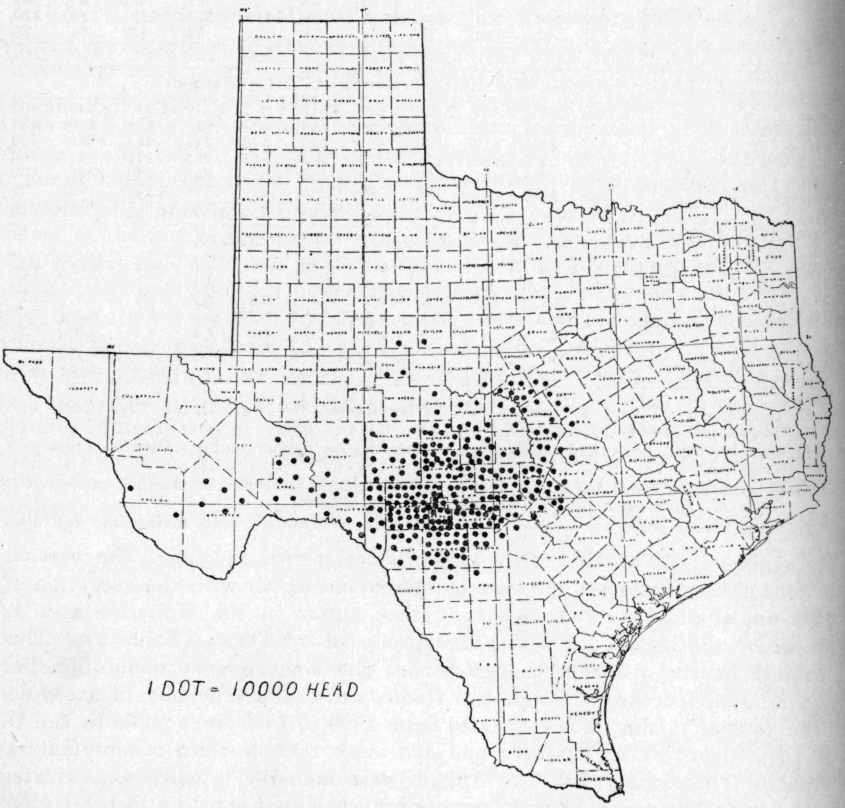

Figure 1—Angora Goats and Kids: Number on Farms in Texas on April 1, 1930, According to the U. S. Census.

No official figures are available on total world production, but an estimate may be obtained for 1930 as follows: six important states in the United States producing about 95 per cent of the total reported a clip of 16,006,000 pounds, making about seventeen million for the United States; Turkey and the Union of South Africa produced 20,150,000 pounds; the United Kingdom imported from countries other than the three mentioned above 352,000 pounds. Adding these figures gives a total of 37,502,000 pounds, or if minor countries are included, a world total of about 38 million pounds.

The tendency for production to move in cycles or alternating periods of high and low production is shown by Figure 2 and Figure 3. Allowing

for the long-time upward movement by expressing production as per cent of this upward trend, there is a tendency for production to run in cycles. High prices stimulate production to the point of excessive supply, where profits decline and then the rate of production.The Union of South Africa shows one complete cycle of six years and another of four years, counting from peak to peak. The bottom of the present cycle was

Table 3.—Mohair Production in the United States and Texas.

Year	United States (In 1,000 lbs.)	Texas (In 1,000 lbs.)	Texas as Percentage of U.S.
			Per cent
1909	3,779*	----	----
1910	3,839†	----	----
1911	3,900†	----	----
1912	4,000‡	----	----
1913	4,500‡	----	----
1914	5,300†	----	----
1915	6,000‡	----	----
1916	6,500†	----	----
1917	7,100†	----	----
1918	7,500†	----	----
1919	8,000‡	5,085*	----
1920	8,474	6,786	80
1921	9,362	7,607	81
1922	8,488	6,838	81
1923	9,067	7,352	81
1924	9,857	7,996	81
1925	10,432	8,519	82
1926	11,799	9,887	84
1927	13,470	11,312	84
1928	14,522	12,330	85
1929	15,705	13,500	86
1930	16,006	13,800	86

*U. S. Census.
†Interpolated.
‡Commercial Estimates from Bulletin of the National Association of Wool Manufacturers, April, 1931.
1920-30 from U. S. Department of Agriculture Yearbook, 1930, and Crops and Markets, February, 1931.
Kid hair is included.
Production for United States includes the six principal producing states only—Texas, New Mexico, Arizona, California, Oregon, Missouri. These states produce about 95 per cent of the total U. S. production. In 1919 the above states produced 96 per cent of the U. S. production, according to Census reports.

apparently reached in 1927, since which time the Union of South Africa has been in the upward phase of the cycle. In the United States the bottom of the present cycle was apparently reached in 1922.

It will be noted that there is considerable fluctuation in imports, the annual range for the period 1914-30 being from 1.1 million pounds to 10.0 million (Table 8). Mohair imports are determined largely by the relationship between foreign and domestic prices. Figure 4 shows that, with the exception of 1925, whenever the ratio of prices of foreign mohair to domestic has become smaller, imports have declined, and when the ratio has become larger imports have increased (see Figure 4). In spite of the rapid increase in mohair production in the United States, this country is still on an import basis. As shown in Table 6, imports since 1923 have been as high as 75 per cent of our production, and not until 1930 did the records show a proportion of imports less than 17 per cent of production. The very large imports in 1926 were due to the fact that a considerable amount of mohair was re-ex-

ported from the United Kingdom, which was experiencing a severe business depression (see Table 16, Appendix). No figures are available on consumption and stocks, with the exception of stocks of foreign mohair remaining in bonded customs warehouses and census reports on consumption in certain industries.

The world's principal markets for mohair are the United Kingdom, Germany, the United States, and Japan. Table 15 in the Appendix shows that those countries take practically all of the South African clip. The United

Table 4.—Mohair: Production in the Union of South Africa and Turkey.

(In 1,000 Pounds)

Year	Union of So. Africa	Turkey	Year	Union of So. Africa	Turkey	Year	Union of So. Africa	Turkey
1839	-------	1,247	1892	7,900	7,800	1912	23,400	12,400
1857	1	2,900	1893	9,500	8,000	1913	17,970	12,100
1867	51	4,800	1894	12,500	6,900	1914	16,600	11,000
1875	1,200	5,321	1895	11,100	11,000	1915	17,190	8,900
1876	1,900	4,420	1896	10,000	-------	1916	17,374	5,100
1877	2,000	5,984	1897	10,400	11,600	1917	-------	4,300
1878	2,500	4,641	1898	11,200	11,600	1918	19,700	3,800
1879	3,000	5,831	1899	12,400	11,800	1919	15,600	3,700
1880	2,800	8,250	1900	11,990	12,000	1920	9,900	4,100
1881	3,000	4,200	1901	12,000	12,500	1921	16,212	3,900
1882	3,600	9,060	1902	13,500	12,700	1922	19,560	6,337
1883	5,200	7,260	1903	15,300	12,800	1923	15,630	6,360
1884	6,700	9,000	1904	16,800	12,600	1924	14,343	4,900
1885	7,200	6,400	1905	17,000	12,500	1925	13,038	7,700
1886	6,500	9,900	1906	16,500	12,500	1926	12,007	6,800
1887	6,500	5,700	1907	18,600	12,400	1927	8,788*	8,200
1888	5,400	7,500	1908	18,200	12,500	1928	9,183*	9,900
1889	7,350	8,800	1909	19,650	12,200	1929	9,338*	6,944
1890	6,600	4,100	1910	17,800	12,600	1930	10,250*	8,800
1891	6,800	6,500	1911	21,000	12,600	1931	-------	9,900

*Exports for seasons ending June 30 following year and includes 2,000,000 to 2,500,000 pounds from Basutoland.

From Miscellaneous Circular No. 50, U. S. Dept. of Agriculture, "Angora Goat and Mohair Industry," except 1920-31, which was compiled from sources indicated below by the Division of Statistical and Historical Research, Bureau of Agricultural Economics, U. S. Department of Agriculture.

Union of South Africa: Years 1857-1922, Angora Goat and Mohair Industry, page 85, Series—Miscellaneous Bulletin 50, published jointly by the United States Department of Agriculture and United States Department of Commerce. The bulletin states that export figures were used for certain years when production statistics were lacking. Also the figures from 1913 on are estimates of receipts at Port Elizabeth, compiled by Hannam and Co. of that city. These figures were used instead of exports as representing production for the reason that in some years there has been a considerable carryover from one year to the other. Official estimates of mohair produced on farms for the years beginning September 1 are as follows in 1,000 of pounds: 1920, 8,449; 1921, 8,623; 1922, 9,454; 1923, 8,099; 1924, 8,051; 1925, 7,880; 1926, 5,653; 1927, 5,268; 1928, 6,270. These figures are considerably smaller than either receipts at Port Elizabeth or exports, the difference apparently being accounted for by mohair pulled from slaughtered goats and goats which died from disease as also by mohair shorn by speculators which is not taken into account in the production figures. For 1927, 1928, export figures have been used, as receipts at Port Elizabeth are not available. 1929 and 1930 exports, May Monthly Review, Standard Bank, London and South Africa, Ltd.

Turkey: Years 1839-1921, Angora Goat and Mohair Industry, page 86, Series—Miscellaneous Bulletin 50, published jointly by the United States Department of Agriculture and the United States Department of Commerce. The bulletin states that export figures were used for certain years when production statistics were lacking. Years 1922-1930, commercial or unofficial estimates, those from 1924-1928 being furnished by Commercial Attache Julian Gillespie, May 20, 1929, and July 21, 1930. Wool Record and Textile World, Sept. 25, 1930. Quot. British Chamber of Commerce of Turkey. 1931 Com. Att. Gillespie, 2-10-31.

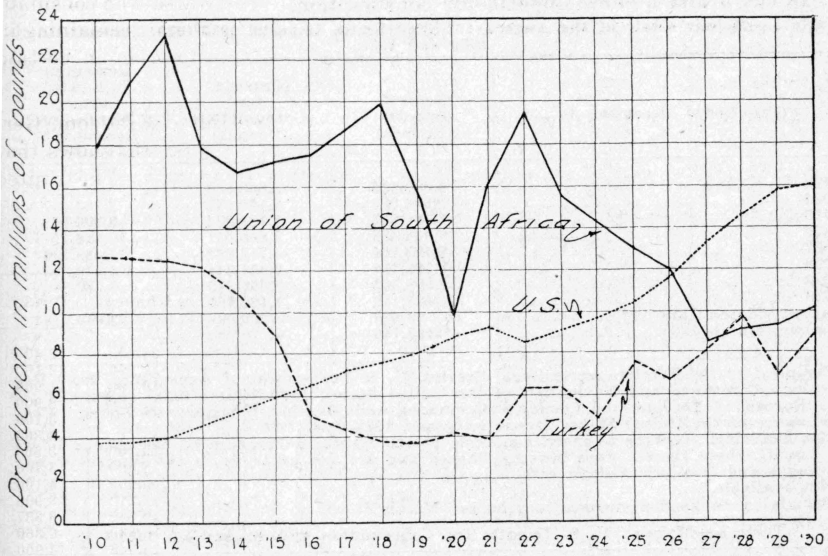

Figure 2.—Mohair Production in Turkey, the United States and the Union of South Africa.

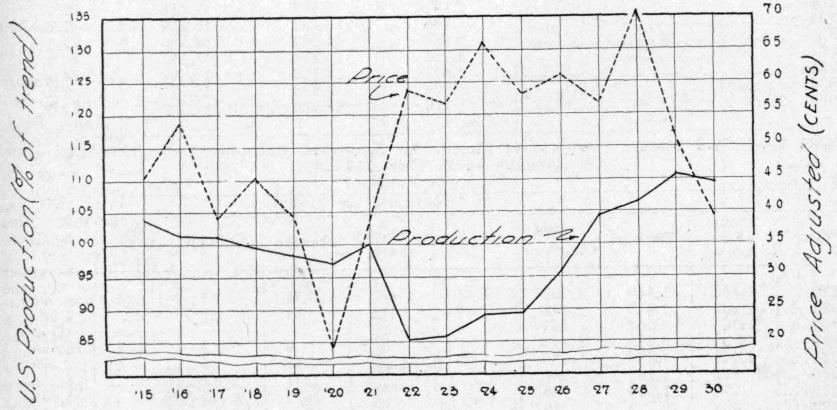

Figure 3.—Mohair Production in the United States as Per Cent of Trend Line and Price Received by Producers Adjusted for the General Price Level.

A straight-line trend describing the general upward movement was fitted to production and each year expressed as a per cent of the trend line, thereby obtaining a measure of the cyclical movement. The price of mohair has been adjusted for the general price level by dividing by the Bureau of Labor Statistics index of wholesale prices.

IMPORTS AND CONSUMPTION

Tables 5 and 6 show imports for consumption.

Table 5.—Mohair (Hair of the Angora): United States Imports, 1923-1930, January-March, 1930 and 1931.

Year Ended December 31	General Imports (Pounds)	Imports for Consumption (Pounds)	Remaining in Bonded Customs Warehouses December 31 (Pounds)
1923	4,603,526	3,888,833	*
1924	3,990,089	3,160,637	3,553,457
1925	1,768,353	1,783,994	3,396,958
1926	10,666,493	8,886,951	10,328,117
1927	2,498,804	4,712,087	4,088,396
1928	3,263,214	2,941,344	3,820,296
1929	1,968,393	2,865,749	3,282,560
1930	427,119	1,122,521	†
January-March 1930	95,487	350,524	3,040,976‡
January-March 1931	165,746	70,380	†

Compiled by the Foreign Agricultural Service, U. S. Department of Agriculture, from Foreign Commerce and Navigation of the United States, 1923-1929; official sources of the Bureau of Foreign and Domestic Commerce and Monthly Summary of Foreign Commerce of the United States, December issues, 1923-1930.

*Not available. (Owing to much confusion in the figures on account of the change in the tariff, these figures were never published and are not available in the Bureau of Foreign and Domestic Commerce.)

†Not available.

‡Remaining in bonded customs warehouses March 31.

Table 6.—Mohair: U. S. Imports for Consumption and Production, 1923-1930.

Year	Imports for Consumption (1,000 lbs.)	Production (1,000 lbs.)	Total (1,000 lbs.)	Imports as Percentage of Production (Per Cent)
1923	3,889	9,067	12,956	42.9
1924	3,161	9,857	13,018	32.1
1925	1,784	10,432	12,216	17.1
1926	8,887	11,799	20,686	75.3
1927	4,712	13,470	18,182	35.0
1928	2,941	14,522	17,463	20.3
1929	2,866	15,705	18,571	18.2
1930	1,123	16,006	17,129	7.0

Table 7.—United States: Imports of Mohair by Countries, Calendar Years 1923-1930, and January-April, 1930 and 1931.
(In 1,000 Pounds.)

Year	Countries of Origin								
	Union of So. Africa	Turkey	United Kingdom	China	Australia	Mexico	Canada	Other Countries	Total
1923	1,142	1,649	1,705	64	.....	14	9	21	4,604
1924	803	913	2,045	47	148	25	9	.....	3,990
1925	1,004	268	487	9	.....	.....	*	.....	1,768
1926	3,886	3,889	2,874	5	*	6	2	4	10,666
1927	1,047	1,274	80	92	.....	.....	5	1	2,499
1928	512	2,104	509	.....	.....	137	1	.....	3,263
1929	734	1,120	95	.....	*	18	1	.....	1,968
1930	336	9	82	.....	.....	.....	.....	.....	427
Jan.-Apr.									
1930	55	.....	40	.....	.....	.....	.....	1	96
1931	131	.....	34	.....	.....	.....	.....	1	166

Compiled by the Foreign Agricultural Service, U. S. Department of Agriculture, from Foreign Commerce and Navigation of the United States, 1923-1929; and official records of the Bureau of Foreign and Domestic Commerce.

*Less than 500 pounds.

Table 8.—Mohair: Imports Into the United States by Fiscal Years, 1914-1930.

Year Ending June 30:	Quantity (1,000 pounds)	Value (1,000 dollars)	Aver. Import Value per Lb. in Cents (a)
1914	1,717	572	33.3
1915	5,302	1,633	30.8
1916	9,145	2,403	26.3
1917	8,162	3,096	37.9
1918	2,312	1,068	46.2
1919	7,908	4,047	51.2
1920	8,184	4,596	56.2
1921	3,612	1,128	31.2
1922	4,246	1,146	27.0
1923	10,072	3,926	39.0
1924	3,583	1,805	50.4
1925	2,404	1,236	51.4
1926	6,463	3,230	50.0
1927	6,547	2,967	45.3
1928	2,204	1,053	47.8
1929	3,291	1,581	48.0
1930	1,074	451	42.0

(a) Computed from quantity and value.

Quantity and value from "Foreign Trade of the United States" by Caroline G. Gries, Division of Statistical and Historical Research, Bureau of Agricultural Economics, except 1930, which is from monthly Summary of Foreign Commerce of the United States, for June, 1930.

Mohair not separately classified prior to 1914 but included with hair of the alpaca and other like animals.

The value in the second column is the foreign value or the export value, whichever is higher; that is, the market value or the price at which the merchandise, at the time of exportation to the United States, is offered for sale in the principal markets of the country from which exported, including the cost of containers or coverings and all expenses incident to placing the merchandise in condition ready for shipment to the United States.

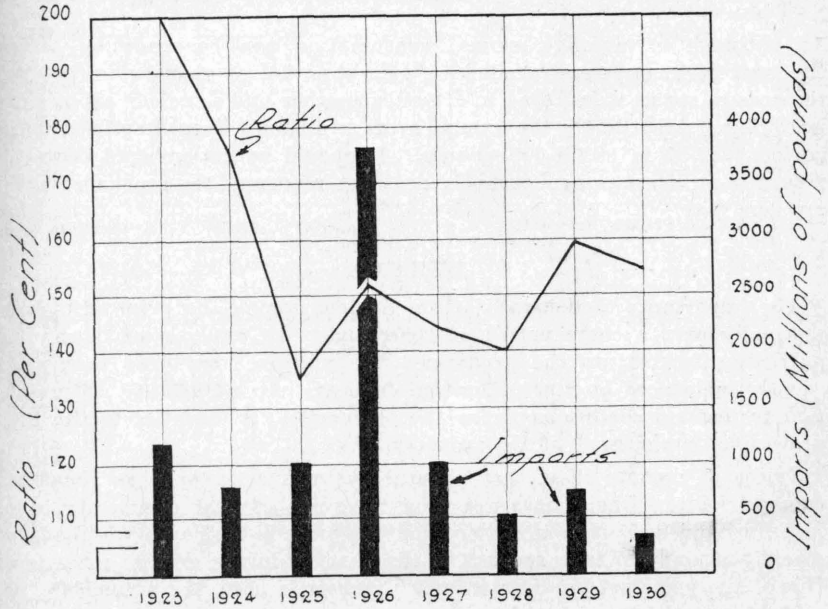

Figure 4.—Mohair Imports into the United States from the Union of South Africa and Ratio of Foreign Prices to Domestic.

Kingdom also imports considerable quantities of mohair from Turkey as well as from minor countries. A large amount of the raw material is manufactured into yarn and exported (Tables 16, 17, and 18 in the Appendix).

The total of imports for consumption and production does not accurately represent consumption, since it does not take account of the carryover of stocks, which varies considerably from year to year. The discrepancy is shown by the fact that the total mohair consumed by the woolen industries alone in 1925 (see Table 9) was 15,688,000 pounds, or 3,472,000 pounds more than the total of imports and production. In 1927, however, the woolen industries used 2,494,000 pounds less than the production plus imports.

Table 9.—Mohair: Quantities Consumed in the Woolen Industries.

(In 1,000 Pounds.)

Year	Domestic	Foreign	Total
1904	2,685	2,936	5,621
1909	2,454	787	3,241
1914	6,929	2,446	9,375
1919	7,549	4,723	12,272
1925	.....	.....	15,449
1927	.....	.....	15,688

U. S. Census.
Includes the principal branches of the woolen industries; woolen goods, worsted goods, felt goods, wool hats.

An estimate of average annual consumption can be made by taking the total of imports and production over a period of years, since the differences in stocks would tend to offset each other and since our exports are negligible. Accordingly the annual average estimated consumption for the period 1923-30 is 16,278,000 pounds. It should be remembered that this figure is an average and probably does not represent the consumption for any one year.

DEMAND

The importance of demand factors in determining the price of mohair, especially over a short period of time, makes an analysis of demand of particular interest to the producer. His margin from year to year is greatly influenced by fluctuations in demand. An adjustment of production to demand conditions, in so far as feasible, is essential to the most profitable development of the industry.

Prices of mohair show that general business activity is an important demand factor; when times are good the price of that commodity is relatively high, and when times are bad the price is low, even when adjustments are made to take account of the changes in the general price level. One of the principal products in which mohair is used, the automobile, has a highly elastic demand and hence sales are greatly influenced by changes in incomes. The other principal product, furniture, can be used for a long

time and purchases may be postponed during a business depression. Furniture, therefore, is likewise a commodity the sales of which are much affected by changes in the purchasing power of the consumer. Figures compiled by the Federal Reserve Board on wholesale sales of furniture show a decided slump in 1921 and 1930, years of business depression.

Automobile production in the United States has proceeded at a rapid rate, with no indication of having reached the saturation point. However, the maximum rate of increase has apparently been passed and in the future the rate may be expected to slow down. It was not until the development of the closed type of car that the automobile industry became an important factor in the demand for mohair. This is clearly illustrated in Figure 5, in which the total production of automobiles, the production of closed cars, and the production of mohair in the United States from 1913-30 is shown. From this figure it will be seen that there was no material rise in the trend of production of automobiles during the period 1923-30. On the other hand, it will be noted that the number of closed cars produced increased very rapidly, accompanied by a marked increase in mohair production during those years. In this connection it is significant that the annual production of mohair in Texas has approximately doubled since 1923.

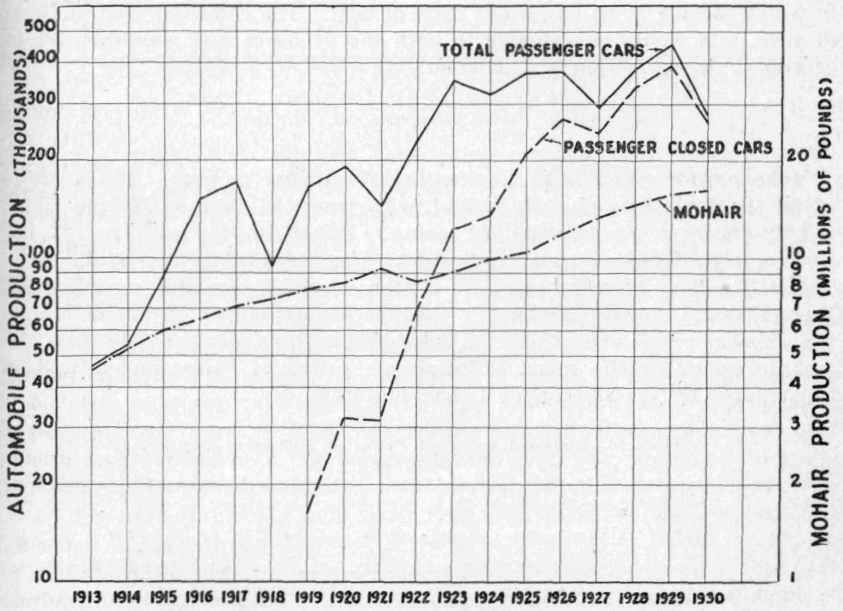

Figure 5.—Production of Mohair, all Passenger Automobiles, and Closed Passenger Cars in the United States.

Note.—The vertical scale is constructed so as to show percentage or ratio changes. Equal vertical distances on the scale represent equal percentage changes. Automobile production from U. S. Department of Commerce Year Book.

If the automobile industry continues to expand abroad, some increase may take place in the foreign demand for mohair. Exports to take advantage of these markets would meet with difficulties in the way of tariff barriers and increasing competition from other producing countries. However, this is not contrary to past experience. In 1923 and 1927 appreciable quantities were exported from the United States to the United Kingdom, according to British returns as shown in Table 18, Appendix.

The demand for mohair is affected by the prices of competing textile fibers, but lack of statistical data makes it impossible to ascertain to what extent other fibers are substituted for mohair when the price of that commodity is relatively high. The demand for mohair in upholstering railroad car seats has not shown an increase during the past few years, according to statistics on cars held by railroads, as published by the U. S. Department of Commerce. The use of mohair in men's summer suitings, in linings for coats, and in draperies and rugs, may be expected to increase with the growth of population, but other fibers compete strongly for these uses. There is the further possibility of increasing the demand for mohair through the development of new uses.

A thorough study of demand would include an analysis of statistics on sales and price of mohair and the consumption of rival commodities such as wool, cotton and rayon, and on stocks and retail sales of finished goods in which mohair is an important item of cost. The collection and analysis of such data would be valuable to both the producer and manufacturer in coordinating production and demand.

PRICES

Mohair prices show wide fluctuations from year to year. The average of all the deviations of each annual price from the average for the whole twenty-one-year period was 12.9 cents. Prices, on the average, do not show a significant seasonal movement. An index of prices is shown in Table 10. The prices quoted at Boston of good combing mohair have been adjusted for the change in the purchasing power of the dollar, or the general price level. This adjustment has been made by dividing the mohair prices by the index of wholesale prices of "all commodities" as constructed by the Bureau of Labor Statistics.

Table 10.—Seasonal Index of Prices of Mohair at Boston.
1915-1930

January	101
February	101
March	100
April	98
May	99
June	102
July	99
August	100
September	98
October	99
November	102
December	102

An average was taken of all the January's, all the February's, etc. and these twelve averages were expressed as percentages of their own average.

The price of grown hair received by producers was higher in 1923-28 than during the pre-war period. As supplies have increased, this would indicate that demand has considerably increased (see Figure 6). Prices

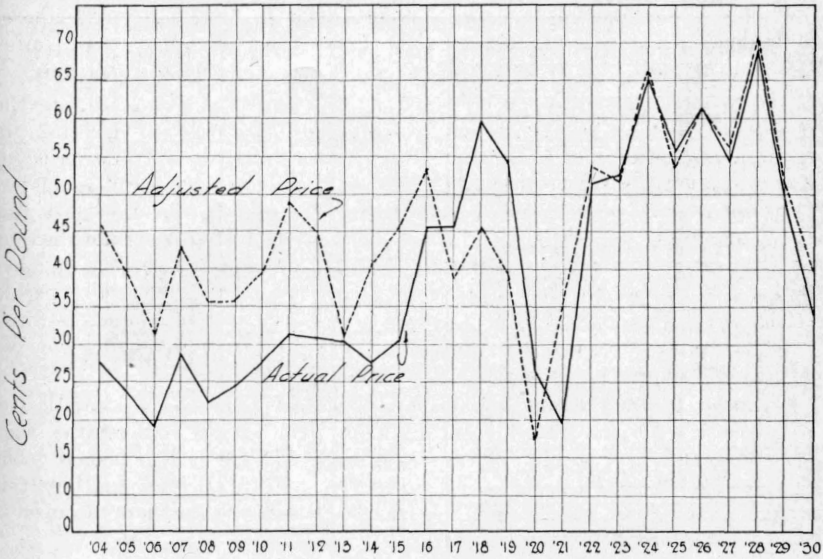

Figure 6.—Prices of Kid and Grown Mohair Received by Producers in Texas, Actual and Adjusted for Changes in the General Price Level.

show the effect of the business depressions of 1908, 1920-21, and 1930-31. Part of the effect of the business cycle on mohair prices was removed when they were adjusted for changes in the purchasing power of the dollar. Actual prices as obtained from local dealers are shown in Table 11, which are plotted with prices adjusted to changes in the general price level in Figure 6. Table 12 gives an average price for kid and grown hair combined. In most cases the prices are weighted arithmetic averages, the quantities sold in pounds net being used as weights.

The tendency for cycles of production and prices to have an inverse relationship is shown in Figure 3. A line has been fitted to production, measuring the average long-time movement. Production for each year has been expressed as a percentage of this trend line, thereby eliminating the long-time upward movement and showing the cycle in production. The high point of the production cycle is accompanied by the low point of prices. In 1922-25 the cycle in production reached its lowest point, and prices were relatively high. The recovery of prices in 1922 was also accelerated by improvement in general business activity and changes in the tariff. The cyclical effect of production on prices is not so evident prior to 1920, but this may be due to the fact that production estimates were not so accurate then as in later years. Foreign production does not appear to exercise as great an influence on prices as domestic production,

Table 11.—Mohair: Prices Received by Producers in Texas, 1904-1931.
(In Cents per Pound.)

Year	Spring		Fall	
1904	28.0		27.4	
1905	26.1		21.7	
1906	19.6		19.1	
1907	25.5		30.7	
1908	25.4		19.4	
1909	24.7		23.8	
1910	27.0		28.1	
1911	32.0		31.4	
1912	29.8		32.4	
1913	33.2		28.2	
1914	26.5		29.1	
1915	30.8		32.0	
1916	35.4		56.0	
1917	44.0		47.5	
1918	44.0		75.0	
1919	53.5		55.0	
1920	28.9		25.0	
1921	18.0		22.0	
1922	42.0		62.0	
	Grown	Kid	Grown	Kid
1923	55.0	64.0	43.0	80.0
1924	63.6	84.0	61.9	76.0
1925	52.9	67.2	54.7	69.0
1926	60.0	75.6	57.8	75.2
1927	52.2	62.2	53.2	63.2
1928	71.0	83.2	63.4	74.1
1929	51.1	60.8	44.6	55.3
1930	35.0*	45.0*	30.0*	40.0*
1931	22.2	30.0	-----	-----

Prices obtained from the principal warehouses in the producing areas and weighted by the quantities sold.

*Advances by the cooperative associations.

Table 12.—Value and Average Price of Grown Mohair and Kid Hair Produced in Texas, 1920-1930.

Year	Value (in 1,000)	Average Price (Cents)
1920	$2,280	26.9
1921	1,872	20.0
1922	4,414	52.0
1923	4,755	52.4
1924	6,436	65.3
1925	5,836	55.9
1926	7,242	61.4
1927	7,301	54.2
1928	10,007	68.9
1929	7,747	49.3
1930	5,442	34.0

Value obtained by multiplying production by price to growers as reported by local dealers. Kid hair estimated at 15 per cent of total production. Kid hair not reported separately prior to 1923.

which is to be expected in view of the importance of the United States in world production. The instability of the market for the period 1923-30, is shown by the fact that a change of direction took place in producers'

prices every year except 1929 (see Figure 6). A thorough study of the factors affecting price, showing the causes of each of the year-to-year changes, would require considerably more statistical data than have been assembled in this Bulletin. For example, figures on stocks in this country and abroad are necessary to get an estimate of supply.

Margins between Boston prices and prices received by producers are shown in Table 13. The basic data from which these margins have been

Table 13—Prices Per Pound of Grown and Kid Mohair, Boston and Texas, 1927-1931

	Year				
	1927	1928	1929	1930	1931
TEXAS SPRING GROWN:					
Price at Boston (cents)	58.0	65.3	62.0	47.6	28.7
Producers' Price in Texas (cents)	52.2	71.0	51.1	35.0	22.2
Margin Boston over Texas (cents)	5.8	-5.7	10.9	12.6	6.5
Margin as Percentage of Price in Texas	11.1	.....	21.3	36.0	29.3
TEXAS SPRING KID:					
Price at Boston (cents)	69.0	86.0	81.1	59.3	48.0
Producers' Price in Texas (cents)	62.2	83.2	60.8	45.0	30.0
Margin Boston over Texas (cents)	6.8	2.8	20.3	14.3	18.0
Margin as Percentage of Price in Texas	10.9	3.4	33.4	31.8	60.0
TEXAS FALL KID:					
Price at Boston (cents)	74.0	85.0	67.7	50.3	.....
Producers' Price in Texas (cents)	63.2	74.1	55.3	40.0	.....
Margin Boston over Texas (cents)	10.8	10.9	12.4	10.3	.....
Margin as Percentage of Price in Texas	17.1	14.7	22.4	25.8	.....

Boston prices are averages for the shearing months: February, March, and April, and August, September, and October.

computed are shown in Tables 19 and 20, Appendix. It is very difficult to get an accurate comparison for the purpose of showing margins between markets or marketing agencies. There is probably some difference in grade and quality, since the Texas price is for all grades, whereas the Boston price is for good quality. Furthermore, the period of time during which the commodity is sold by producers does not correspond with the dates on which it is sold at the central market. To get an accurate comparison of prices it would be necessary to have the producers' price for each clip and the price for which the same clips were sold at the central market. The significance of Table 13 is that it shows a wide variation in the margins, ranging from 11 per cent to 36 per cent, or from 5.8 cents to 12.6 cents per pound on the Boston market over the producers' price in Texas, indicating the speculative nature and risk involved in the mohair business. Lack of trading on a quality basis in the local markets is one of the factors causing the price spread.

As shown by Figure 7, the difference between prices of good grades and of poor grades increases as average prices increase, and likewise declines with a fall in prices. Business conditions, in addition to the relative supply of different grades, influence the differences in price. When times are good and prices are rising, there is a premium for the better grades.

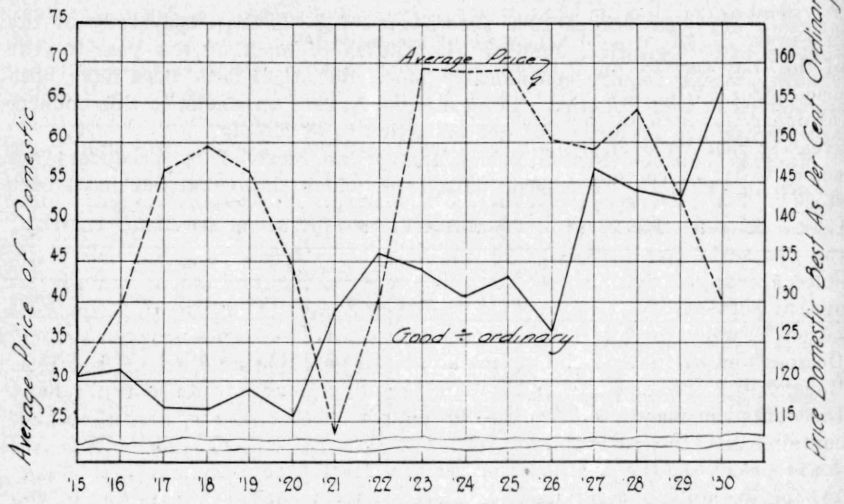

Figure 7.—Spread Between High Grades and Low Grades in Boston Prices of Domestic Mohair.

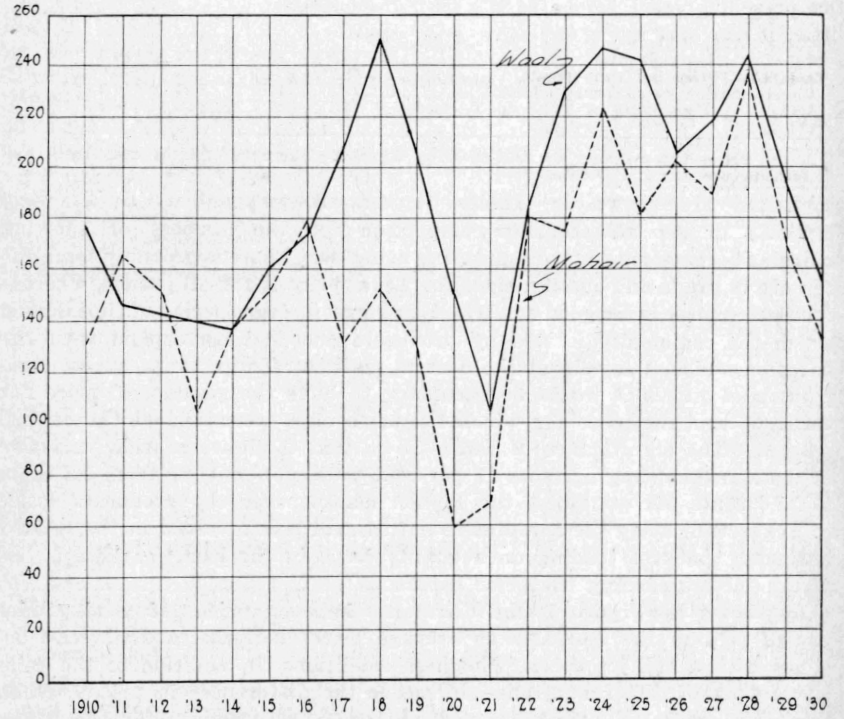

Figure 8.—Prices of Wool and Mohair Received by Producers in Texas, Relative to the Average for 1910-14.

A comparison of producers' prices of wool and mohair in Texas is shown in Figure 8, where both series of prices have been expressed as relatives of the five-year average, 1910-14, and adjusted for changes in the general price level. Wool and mohair prices show a close relationship, both being influenced by general demand and business conditions. Wool showed the greatest margin over mohair, relative to 1910-14, during 1918 and 1919, when wool prices were influenced by governmental control of foreign stocks. The difference between the two during the past three years has been relatively small. The year-to-year changes in the difference between the two series are more significant than the difference for any one year, since a change from 1910-14 to some other base period would change the spread between the two series. Prices of mohair have shown little variation between producers, no regard being paid to differences in quality. Dealers tend to offer a flat price for grown hair and another for kid hair. Beyond this differentiation, little attempt is made to classify mohair. Discounts are made from the prevailing price if the hair is poorly packed, contains dirt, burrs, grass, etc., or if it is dark or very short. In early years prices on the local market varied considerably as shown in Table 14, for example, indicating that there was considerable variation in the price of mohair, with about three distinct grades predominating. Under the present system of marketing, it appears that the grower gets very little, if any, premium for extra good quality.

Table 14.—Prices and Quantities of Mohair Sold by a Representative Dealer in Texas.

Spring, 1907		Fall, 1907	
Price (Cents per lb.)	Number Lbs. Sold	Price (Cents per lb.)	Number Lbs. Sold
15.0 — 16.4	166	26.0 — 26.9	1,311
16.5 — 17.9	922	27.0 — 27.9	5,622
18.0 — 19.4	2,214	28.0 — 28.9	29,097
19.5 — 20.9	2,647	29.0 — 29.9	14,197
21.0 — 22.4	4,963	30.0 — 30.9	35,337
22.5 — 23.9	47,702	31.0 — 31.9	11,295
24.0 — 25.4	41,075	32.0 — 32.9	9,458
25.5 — 26.9	728	33.0 — 33.9	87,551
27.0 — 28.4	4,373	34.0 — 34.9	44,104
28.5 — 29.9	8,305	35.0 — 35.9	2,147
30.0 — 31.4	92,214	.....	.....
TOTAL	205,309		240,119

Prices are net to the grower.

OUTLOOK FOR FUTURE DEMAND AND PRODUCTION

How long can the present trend of production of mohair be maintained without the supply becoming burdensome? The supply has been burdensome during periods of extremely low business activity, as exemplified in the low price in 1920-21 and 1930-31. The producer should look ahead and anticipate the probable short-time cyclical effects of general business conditions and also the long-time position of supply and demand. A recovery

in business activity may indicate a temporary scarcity of supplies, when in fact the long-time trend of production may be at a faster rate than the trend of consumption. If the trend of production which has obtained for the past twenty years continues for the next five years, the United States would be producing approximately 19 million pounds. If the trend for the past five years were to continue, by 1936 the United States would be producing about 24 million pounds, and Texas about 20 million. Practically all of the foreign mohair is produced in two countries, Turkey and the Union of South Africa. The trend of production in Turkey has been upward since 1921. In the Union of South Africa the bottom of the cycle was apparently reached in 1927. The normal growth in the United States population will cause some increase in demand, but most of the increase in the past has been due to new uses for mohair, new tastes of the consumer, and, consequently, an increased consumption per capita. Assuming that we supply all of our needs and cease to import mohair, in order to consume the 24 million pounds in 1936, we should have to increase our per capita consumption about 25 per cent over the average for the past few years. It is to be expected that some new uses for mohair will be developed, but on the other hand, increasing competition with other textiles is likely. The automobile industry, which absorbs a large proportion of the mohair production, will continue to grow, but the rate of growth has already begun to decline. It seems unlikely that we shall have an export market for our mohair in the near future at least. In view of the foregoing, the conclusion seems warranted that the rate of mohair production in Texas cannot continue as it has during the past few years without danger of overproduction. The increase in Angora goat population should be checked and greater efforts made to increase the clean weight per fleece, to continue improving the breed and the quality of mohair, to eliminate kemp, and to handle and pack the fleeces in a more careful manner.

Trading on the basis of standardized grades in the local markets would do much to recognize quality and encourage growers to make further improvements in their breeding.

NEED FOR STATISTICS

A study of the local market indicates the urgent need for more information and statistics on the mohair industry. A current market news service directed by an impartial agency would strengthen the producers' position and establish a more competitive price in the market. Statistics on central market prices can be obtained from reliable sources, while figures on imports and production in the United States and abroad are being furnished through governmental sources. If mills and dealers at the central market would make available monthly figures on consumption, stocks, and sales, such as are now being compiled by the cotton and wool industries, it would result in mutual benefit to the trade; periodic gluts and scarcity would be lessened, and the position of the producer and trade as a

whole would be materially improved. There is an especial need for a continuous service which would bring together and issue promptly all the available information on mohair.

Table 15.—Union of South Africa: Exports of Mohair by Countries, Calendar Years, 1913, 1922-1930.
(In 1,000 Pounds.)

Year	Countries of Destination						
	United Kingdom	Germany	Belgium	United States	Japan	Other Countries	Total
1913	17,138	140	77	(*)	.....	1	17,356
1922	21,634	72	3	4,047	.....	37	25,793
1923	14,099	132	.....	727	1	29	14,988
1924	12,240	25	.....	1,391	.....	10	13,666
1925	10,937	59	.....	535	13	16	11,560
1926	6,465	26	.....	4,592	11	47	11,141
1927	9,787	24	.....	755	22	93	10,681
1928	6,896	5	6	794	.....	3	7,704
1929	8,889	9	.....	1,000	21	119	10,038
1930 prelim.**	.....	.....	.....	.....	.....	.....	6,874

Trade and Shipping of the Union of South Africa, 1913 and 1922-1929, and Trade of the Union of South Africa and Southwest Africa, December issue, 1930.
*Less than 500 pounds.
**Not available by countries.
Compiled by the Foreign Agricultural Service, U. S. Department of Agriculture.

Table 16.—United Kingdom: Imports of Mohair, Re-Exports and Amount Retained for Consumption and Exports of Mohair Yarn (Including Alpaca and Cashmere), Average 1909-1913, 1921-1925, Calendar Years 1923-1930.
(In 1,000 Pounds.)

Year	Mohair			Mohair Yarn Including Alpaca and Cashmere
	Total Imports	Re-Exports	Amount Retained for Consumption	Exports
Average 1909-1913	30,168	964	29,204	16,378
Average 1921-1925	21,883	2,045	19,838	7,371
1923	22,550	1,794	20,756	9,538
1924	20,883	2,539	18,344	8,380
1925	13,413	701	12,712	8,059
1926	11,069	4,543	6,526	6,336
1927	20,396	238	20,158	9,007
1928	14,537	640	13,897	8,880
1929	12,721	329	12,392	7,927
1930 (Preliminary)	13,893	242	13,651	5,901
January-April 1930	3,380	60	3,320	2,115
January-April 1931	3,413	102	3,311	1,244

Compiled from Annual Statement of the Trade of the United Kingdom, 1909-1929, and Accounts of Trade and Navigation of the United Kingdom, December, 1930, and April, 1931.
Compiled by the Foreign Agricultural Service, U. S. Department of Agriculture.

Table 17.—United Kingdom: Re-Exports of Mohair by Countries, Calendar Years, 1913, 1923-1930, and January-April, 1930 and 1931.
(In 1,000 Pounds.)

Year	Countries of Destination				Total
	Germany	United States	Other Foreign Countries	British Possessions	
1913	3	1,490	2	----	1,495
1923	56	1,651	86	1	1,794
1924	228	2,209	101	1	2,539
1925	94	529	77	----	700
1926	18	4,377	148	----	4,543
1927	20	155	63	----	238
1928	13	515	112	----	640
1929 (Preliminary)	27	97	205	----	329
1930 (Prelim.)*	----	----	----	----	242
Jan.-April 1930*	----	----	----	----	60
Jan.-April 1931*	----	----	----	----	102

Annual Statement of the Trade of the United Kingdom, 1913, 1923-1929 and Accounts Relating to Trade and Navigation of the United Kingdom, December, 1930, and April, 1931.
*Not available by countries.
Compiled by the Foreign Agricultural Service, U. S. Department of Agriculture.

Table 18.—United Kingdom: Imports of Mohair by Countries, Calendar Years, 1913, 1923-1930, and January-April, 1930 and 1931.
(In 1,000 Pounds.)

Year	Countries of Origin				Total
	British So. Africa	Turkey	United States	Other Countries	
1913	18,523	10,402	(*)	391	29,316
1923	13,823	7,318	1,194	215	22,550
1924	14,044	5,612	337	890	20,883
1925	10,730	2,119	75	489	13,413
1926	5,804	4,961	37	267	11,069
1927	10,335	8,365	816	880	20,396
1928	6,977	7,024	269	267	14,537
1929	8,176	4,286	13	246	12,721
1930 (Prelim.)	6,910	6,631	(*)	352	13,893
Jan.-April 1930	1,633	1,535	(*)	212	3,380
Jan.-April 1931	1,681	1,250	(*)	482	3,413

Annual Statement of the Trade of the United Kingdom, 1909-1929, and Accounts of Trade and Navigation of the United Kingdom, December, 1930, and April, 1931.
*If any, included in "other countries."
Compiled by the Foreign Agricultural Service, U. S. Department of Agriculture.

Table 19.—Texas Mohair: Average Price per Pound on the Boston Market, 1927-1931

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Aver.
Good Original Bag, Texas Spring*:													
1927	----	----	----	58	58	69	72	74	74	----	74	78	72.2
1928	62	62	62	72	76	91	91	91	82	82	82	82	85.5
1929	62	62	62	62	58	69	69	69	68	66	65	64	72.2
1930	51	51	48	44	41	51	51	51	51	49	48	48	53.5
1931	36	31	29	26	26	----	----	----	----	----	----	----	-----
Good Original Bag, Texas Kid:													
1927	----	----	----	69	69	59	59	59	59	59	59	60	58.8
1928	82	82	82	88	91	76	76	76	62	62	62	62	58.8
1929	82	82	81	81	71	58	58	58	57	54	52	51	57.8
1930	64	64	60	54	51	41	41	41	41	37	36	36	42.3
1931	48	48	48	48	48	----	----	----	----	----	----	----	-----

Boston Commercial Bulletin.
Compiled in the Division of Statistical and Historical Research, Bureau of Agriculture.
*Texas "spring" apparently signifies adult hair.

Table 20.—Mohair: Average Price per Pound on Boston Market, by Months, 1915-1931.

Year and Month	Domestic						Foreign			
	Combing			Carding			Cape		Basutos	Turkey Fair Average
	Best	Good	Ordinary	Best	Good	Ordinary	Summer Firsts	Winter Firsts		
	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)
1915—										
January	37	34	31	34	29	26	34	----	----	36
February	37	34	31	34	29	26	34	----	----	36
March	37	34	31	34	29	26	34	----	----	36
April	37	34	31	34	29	26	34	----	----	36
May	37	34	31	34	29	26	34	----	----	36
June	37	34	31	34	29	26	34	----	----	36
July	39	36	32	35	29	26	34	----	----	36
August	39	36	32	36	29	26	34	----	----	36
September	39	36	32	36	29	26	34	----	----	36
October	39	36	32	36	29	26	35	----	----	36
November	39	36	32	36	29	26	35	----	----	36
December	39	36	32	36	29	26	35	----	----	36
1916										
January	38	36	32	36	31	27	35	----	----	36
February	38	36	32	36	31	27	34	----	----	36
March	38	36	32	36	31	27	34	----	----	36
April	38	36	32	36	31	27	34	----	----	36
May	44	40	36	41	35	30	39	----	----	36
June	50	45	40	46	39	34	45	----	----	----
July	50	45	40	46	39	34	44	----	----	----
August	50	45	40	46	39	34	48	----	----	----
September	49	44	40	45	39	34	52	----	----	----
October	49	44	40	45	39	34	52	----	----	----
November	56	52	46	46	44	39	52	----	----	----
December	56	52	46	44	44	39	53	----	----	----
1917										
January	58	53	48	49	47	43	53			
February	62	57	53	58	54	50	56	----	----	----
March	66	61	56	61	57	51	59	----	----	----
April	72	68	62	62	58	51	63	54	55	----
May	72	68	62	62	58	51	64	54	55	----
June	72	68	62	62	58	51	64	54	55	----
July	72	68	62	62	58	51	64	54	55	----
August	69	63	58	60	54	49	62	51	52	----
September	62	58	54	56	52	46	62	51	52	----

Table 20.—Mohair: Average Price per Pound on Boston Market, by Months, 1915-1931—(Continued).

Year and Month	Domestic						Foreign			
	Combing			Carding			Cape		Basutos	Turkey Fair Average
	Best	Good	Ordinary	Best	Good	Ordinary	Summer Firsts	Winter Firsts		
	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)
October	62	58	54	56	52	46	62	51	52	---
November	59	55	51	52	48	44	58	50	48	---
December	58	54	50	50	46	44	58	49	46	---
1918										
January	58	54	50	50	46	44	58	49	46	---
February	58	54	50	50	46	44	58	49	46	---
March	58	54	50	50	46	44	58	49	46	---
April	58	54	50	50	46	44	58	51	48	---
May	59	54	50	50	46	44	58	53	49	---
June	60	55	49	50	46	44	58	53	49	---
July	62	57	51	52	48	46	61	56	51	---
August	73	69	62	65	60	55	73	73	62	---
September	78	73	66	72	66	61	78	78	61	---
October	79	74	67	74	69	64	79	78	64	---
November	88	82	78	82	78	72	88	82	74	---
December	80	75	68	75	70	65	80	79	64	---
1919										
January	76	71	65	71	66	61	76	76	61	---
February	69	64	59	64	59	54	69	67	59	---
March	68	62	58	62	58	52	72	68	58	---
April	58	52	48	52	48	46	68	62	52	---
May	62	58	52	58	52	48	68	62	52	---
June	62	58	52	58	52	48	68	62	52	---
July	62	58	52	58	52	48	69	62	52	---
August	62	58	52	58	52	48	70	62	52	---
September	62	58	52	58	52	48	70	62	52	---
October	62	58	52	58	52	48	70	62	52	70
November	62	58	52	58	52	48	70	62	52	70
December	62	57	52	56	52	46	69	62	52	68
1920										
January	60	55	50	54	50	44	65	61	52	65
February	60	55	50	54	50	44	64	61	52	64

Year and Month	Domestic						Foreign			
	Combing			Carding			Cape		Basutos	Turkey Fair Average
	Best	Good	Ordinary	Best	Good	Ordinary	Summer Firsts	Winter Firsts		
	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)
March	60	55	50	54	50	44	64	61	52	64
April	60	55	50	54	50	44	64	61	52	64
May	58	54	51	52	48	42	61	58	52	61
June	54	52	52	49	46	41	57	54	52	57
July	53	50	48	48	44	41	57	54	52	57
August	48	44	41	39	36	34	49	47	41	51
September	48	44	41	39	36	34	49	47	41	51
October	44	41	38	36	34	32	46	43	38	48
November	41	38	35	34	31	29	43	39	34	44
December	36	33	29	30	27	24	37	34	30	39
1921										
January	31	28	24	26	23	19	32	29	25	34
February	31	28	24	26	23	19	32	29	25	34
March	30	27	22	24	22	18	30	28	24	32
April	28	26	22	24	21	18	29	27	23	31
May	28	26	22	24	21	18	29	27	23	31
June	28	26	22	24	21	18	29	27	23	31
July	28	26	22	24	21	18	29	27	23	31
August	28	26	22	24	21	18	29	27	23	31
September	28	26	22	24	21	18	29	27	23	31
October	28	26	22	24	21	18	29	27	23	31
November	28	26	22	24	21	18	29	27	23	31
December	30	26	22	24	21	18	29	27	23	31
1922										
January	30	26	22	24	21	18	29	27	23	31
February	30	26	22	24	21	18	29	27	23	31
March	30	26	22	24	21	18	29	27	23	31
April	40	36	32	32	28	24	36	33	29	38
May	56	52	48	52	48	42	52	48	42	55
June	56	52	48	52	48	42	52	48	42	55
*July	44	35	30	36	27	24	31	29	25	32
August	52	38	32	48	32	28	31	29	25	32
September	54	38	34	48	34	28	31	29	25	32
October	62	42	38	52	38	32	31	29	26	32
November	71	60	52	65	56	49	31	29	28	34
December	78	72	62	72	68	58	31	29	28	34

Table 20.—Mohair: Average Price per Pound on Boston Market, by Months, 1915-1931—(Continued).

Year and Month	Domestic						Foreign			
	Combing			Carding			Cape		Basutos	Turkey Fair Average
	Best	Good	Ordinary	Best	Good	Ordinary	Summer Firsts	Winter Firsts		
	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)
1923										
January	79	70	62	72	68	58	34	29	34	36
February	80	72	62	72	68	58	36	29	39	39
March	80	72	62	72	68	58	36	29	39	39
April	80	72	62	72	68	58	36	29	39	39
May	80	72	62	72	68	58	36	29	39	39
June	80	72	62	72	68	58	36	29	39	39
July	80	72	62	72	68	58	36	29	39	39
August	80	72	62	72	68	58	36	29	39	39
September	80	72	62	72	68	58	36	29	39	39
October	80	72	62	72	68	58	36	29	39	39
November	80	72	62	72	68	58	36	29	39	39
December	80	72	62	72	68	58	36	29	39	39
1924										
January	80	72	62	72	68	58	36	30	39	39
February	80	72	62	72	68	58	38	31	39	39
March	80	72	62	72	68	58	38	31	39	39
April	80	72	62	71	66	58	38	31	39	39
May	80	72	62	72	68	58	38	31	39	39
June	80	72	62	72	68	58	38	31	39	39
July	77	72	61	68	62	55	38	31	39	39
August	75	71	59	65	60	52	39	32	40	40
September	75	71	59	65	60	52	---	---	---	---
October	81	76	62	71	66	57	49	38	44	51
November	82	78	62	72	68	58	49	38	44	51
December	88	82	68	78	72	62	56	42	46	58
1925										
January	88	82	68	78	72	62	56	42	46	58
February	88	82	68	78	72	62	56	42	46	58
March	88	82	68	78	72	62	56	42	46	58
April	86	81	66	76	71	61	56	42	46	58
May	80	74	60	70	64	54	56	42	45	57
June	78	72	58	68	62	52	55	41	44	56
July	78	72	58	68	62	52	55	41	44	56
August	78	72	58	68	62	52	55	41	44	56

Table 20.—Mohair: Average Price per Pound on Boston Market, by Months, 1915-1931—(Continued).

Year and Month	Domestic						Foreign			
	Combing			Carding			Cape		Basutos	Turkey, Fair Average
	Best	Good	Ordinary	Best	Good	Ordinary	Summer Firsts	Winter Firsts		
	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)
September	78	72	58	68	62	52	55	41	44	56
October	78	72	58	68	62	52	55	41	44	56
November	78	72	58	63	62	52	55	41	44	56
December	78	72	58	68	62	52	55	41	44	56
1926										
January	78	72	58	68	62	52	55	41	44	56
February	78	72	58	68	62	52	53	41	43	52
March	75	70	56	64	59	50	50	39	40	48
April	68	62	52	52	48	42	42	34	34	41
May	68	64	54	54	48	42	42	34	34	41
June	72	68	58	58	52	----	42	34	34	41
July	72	68	58	58	52	----	42	34	34	41
August	72	68	58	58	52	----	42	34	34	41
September	72	68	58	58	52	----	42	34	34	41
October	77	72	62	62	57	51	44	36	36	46
November	76	71	61	61	56	51	44	36	36	46
December	76	71	61	61	56	51	44	36	36	46
1927										
January	75	70	60	60	55	50	44	36	36	45
February	74	69	59	59	54	49	44	36	36	44
March	72	68	58	58	52	48	44	36	36	44

Classification changed April, 1927.

Table 20.—Mohair: Average Price per Pound on Boston Market, by Months, 1915-1931—(Continued).

Year and Month	Domestic									Foreign				
			Combing					Kid		Cape				
	Arizona and New Mexico	Original Average 12 Months Oregon	First	Second	Third	Fourth	Carding, Good	First	Second	Summer First	Summer Kid	Winter First	Basutos	Turkey Fair Average
	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)
1927														
April	52	51	----	----	----	----	----	----	----	44	----	36	36	45
May	53	53	----	----	----	----	----	----	----	44	----	36	36	44
June	53	56	72	62	52	42	42	83	78	45	----	**	**	44
July	53	56	72	62	52	42	42	86	80	45	96	**	**	44
August	54	56	72	62	52	42	42	86	80	45	96	**	**	44
September	54	56	72	62	52	42	42	86	80	45	96	**	**	44
October	54	56	72	62	52	42	42	86	80	45	96	**	**	44
November	54	56	72	62	52	42	42	86	80	45	96	**	**	44
December	55	58	75	65	55	45	45	87	82	45	96	**	**	45
1928														
January	56	59	78	68	58	48	48	88	84	**	**	**	**	46
February	56	59	78	68	58	48	48	88	84	**	**	**	**	48
March	56	59	78	68	58	48	48	88	84	**	**	**	**	50
April	62	66	88	78	68	58	58	92	88	**	**	**	**	53
May	68	71	88	78	68	58	58	98	92	**	**	**	**	53
June	68	71	88	78	68	58	58	98	92	**	**	**	**	53
July	68	71	88	78	68	58	58	98	92	**	**	**	**	53
August	68	71	88	78	68	58	58	98	92	**	**	**	**	53
September	56	59	78	68	58	48	48	89	84	**	**	**	**	51
October	56	59	78	68	58	48	48	88	84	**	**	**	**	51
November	56	59	78	68	58	48	48	88	84	**	**	**	**	51
December	56	59	78	68	58	48	48	88	84	**	**	**	**	51
1929														
January	56	59	78	68	58	48	48	88	84	**	**	**	**	51
February	56	59	75	66	56	46	48	88	83	**	**	**	**	50
March	56	59	68	62	52	42	48	86	81	**	**	**	**	48
April	56	59	68	62	52	42	48	86	81	**	**	**	**	48
May	52	54	66	59	52	42	48	80	77	41	66	**	----	46
June	52	55	66	59	52	42	48	79	76	40	66	**	----	42
July	52	55	66	59	52	42	48	79	76	40	66	**	----	42
August	52	55	66	59	52	42	48	79	76	40	66	**	----	42
September	52	54	65	58	52	42	47	77	75	39	65	**	----	41
October	50	52	64	56	49	39	44	72	70	34	61	**	----	39

Table 20.—Mohair: Average Price per Pound on Boston Market, by Months, 1915-1931—(Continued).

Year and Month	Domestic									Foreign				
			Combing					Kid		Cape				
	Arizona and New Mexico	Original Average 12 Months Oregon	First	Second	Third	Fourth	Carding Good	First	Second	Summer First	Summer Kid	Winter First	Basutos	Turkey Fair Average
	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)	(Cents)
November	49	51	62	56	48	38	44	70	68	34	61	**	----	39
December	47	49	61	56	46	36	44	68	66	34	61	**	----	39
1930														
January	47	49	61	56	46	36	44	68	66	34	61	**	----	39
February	47	49	61	56	46	36	44	68	66	34	61	**	----	39
March	43	46	58	52	42	33	40	64	61	34	61	**	----	34
April	40	42	54	50	39	30	37	61	58	33	59	**	----	31
May	38	39	51	46	36	28	34	56	52	33	57	**	----	31
June	38	39	51	46	36	28	34	56	52	33	57	**	----	31
July	38	39	51	46	36	28	34	56	52	33	57	**	----	31
August	38	39	51	46	36	28	34	56	52	33	57	**	----	31
September	38	39	51	46	36	28	34	56	52	33	57	**	----	31
October	35	37	48	43	33	27	33	56	52	31	57	26	----	29
November	34	36	48	42	32	26	32	56	52	31	57	26	----	29
December	34	36	48	42	32	26	32	56	52	31	57	26	----	29
1931														
January	34	36	48	42	32	26	32	56	52	31	57	26	----	29
February	28	36	42	38	28	24	28	54	49	31	54	20	----	24
March	26	31	37	32	26	22	26	54	49	28	50	20	----	25
April	24	26	32	27	24	19	24	54	49	25	46	20	----	25
May	24	26	32	27	24	19	24	54	49	25	46	20	----	25

*Beginning July 1922 foreign prices are in bond, subject to payment of the import duty.
**Nominal.
Division of Statistical and Historical Research, Bureau of Agricultural Economics.
Compiled from weekly quotations in the Boston Commercial Bulletin.

SUMMARY AND CONCLUSIONS

Sales of mohair by growers in Texas are handled largely through local warehouses on a commission basis. Little attempt is made at grading in the local markets. It is highly desirable that trading be done on a quality basis, and that growers be encouraged to give more attention to quality and methods of packing.

Texas accounts for four-fifths of all the mohair produced in the United States and over two-fifths of the world production. The Texas Angora goat industry is confined to a relatively small area, the Edwards Plateau region, in which is found about 90 per cent of the goat population. The rate of increase in production of mohair in Texas has been extremely rapid for the past nine years.

In the Union of South Africa the trend of production during the past twenty years has been downward, but in Turkey the trend has been upward since 1919.

In spite of the increase in domestic production of mohair, the United States is still on an import basis; imports for consumption for the past seven years, excepting 1930, averaging over one-fourth of the domestic production. The estimated consumption in the United States for the eight-year period 1923-30 is 16,278,000 pounds per annum.

Prices of mohair are influenced by general business conditions and cycles in production. The influence of the business cycle is accounted for by the fact that industries using mohair, such as automobile and furniture industries, have an elastic demand for their finished products and hence sales are greatly influenced by changes in the incomes of consumers. Although production of mohair from 1923 to 1930 increased at a rapid rate, production of closed passenger automobiles proceeded at a much more rapid rate. Since the trend in automobile production is not expected to continue at the rate it has in the past, a continuation of the present rate of increase in production of mohair for the next few years may result in over-production and a large surplus. Consequently, growers should be able to benefit by checking expansion.

Prices of mohair show wide fluctuations from year to year. Margins between prices on the Boston market and those received by producers in Texas, are extremely variable; the percentage differential of Boston over Texas prices ranged from 11 per cent to 36 per cent for the period 1927-31, or from 5.8 cents to 12.6 cents per pound.

There is an urgent need for statistics and market information on the mohair industry. A continuous service of assembling and issuing promptly all available data on mohair would be beneficial to the producer and to the trade.